

A Landsat Image Mosaic of Antarctica (LIMA)

C.A. Hallam, U.S. Geological Survey, challam@usgs.gov; J.L. Mullins, D. Binney, U.S. Geological Survey; A. Fox, British Antarctic Survey, R. Bindshadler, NASA

In preparation for the International Polar Year, the Antarctic Program at the U.S. Geological Survey will collaborate with the Mapping and Geographic Information Centre at the British Antarctic Survey in the development of a Landsat mosaic of the Antarctic continent. BAS will provide the Antarctic Peninsula portion to join with the National Science Foundation-funded mosaic of the rest of the continent. It will be composed of images from mostly the 2001 and 2002 which will cover the portion of the continent north of 82.5 degrees south. The data will be geo-referenced utilizing existing geodetic control and terrain corrected with the ICESAT elevation data mosaic which provides sub-meter vertical accuracy with a horizontal footprint of approximately 70 meters.

The mosaic will provide coverage at 30 meters in color and panchromatic coverage at 15 meters. Data access will be provided through an OGC-compliant Web Map Service, with download access to on-screen selected areas of the mosaic as well as download access to the individual scenes through the same portal. The data will be displayed through an integrated viewer that also displays the other USGS-provided Antarctic base data.